-- Referring to Figure 4, a solder joint at the intermetallic boundary 15 is shown, using the serpentine solder configuration depicted in Figure 3a. It will be observed that the respective micro-cracking 20 at each intermetallic boundary 15 is following a circuitous or meandering path. The lengthening of the crack pathway increases the useful life of the solder joint. Other pad configurations are shown in Figures 3b through 3d. As before, this results in micro-crack pathways which are interrupted, lengthened, or constrained. In a similar manner, these configurations are expected to increase fatigue life of the solder joint, as is that of the solder design shown in Figure 3a. --

IN THE CLAIMS:

Please amend claims 1 and 3 through 5 as follows:

1. (Amended) A solder joint, having a configuration at and near an intermetallic boundary, said configuration for disrupting, constraining, and lengthening the crack pathway at said intermetallic boundary, thereby increasing fatigue life of the solder joint, said solder joint comprising a pad having an irregular boundary layer.

3. (Amended) A solder joint, having a configuration at and near an intermetallic boundary, said configuration for disrupting, constraining, and lengthening the crack pathway at said intermetallic boundary, thereby increasing fatigue life of the solder joint, said solder joint comprising a solder strip having an interdigitated boundary layer.

4. (Amended) A solder joint, having a configuration at an intermetallic boundary, said configuration for disrupting, constraining, and lengthening the crack pathway, thereby increasing fatigue life of the solder joint, said solder joint comprising a solder strip having a curved boundary layer.

5. (Amended) A solder joint, having a configuration at and near an intermetallic boundary in accordance with claim 4, wherein said curved boundary layer further comprises a substantially continuous structure.